METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR CLASSIFYING PACKET FLOWS WITH A BIT MASK

ABSTRACT OF THE DISCLOSURE

Classification of packets into flows is an inherent operation performed by networks that support enhanced services. To support multiple-dimensional packet classification, a packet classification system is provided to select representative bits from a packet to look up a set of rules. The per-flow classification works with a large set of rules, where each rule comprises of multiple fields and also allows fast dynamic variation in the rule set. A lookup process includes a simple and finite set of instructions that can be efficiently implemented as pipelined hardware and support very high packet arrival rates.

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